

# Bulletin

## Automotive Electrical Division



Reference No. Lithium-ion Battery/jk-9-23

Date: 28/09/2023

Dear member

VACC has received numerous enquiries relating to the installation of Lithium-ion batteries to recreational vehicles such as caravans. The following guidance has been prepared for your consideration when installing such batteries.

### Lithium-ion battery requirements

When installing a lithium-ion battery on a recreational or non-recreational vehicle you should consult with the battery manufacturer or supplier in the first instance to determine the compartment design and venting mechanism that is practical for the type of battery chemistry, construction, volatility, or its response to thermal runaway situation.<sup>[1]</sup>

According to Australian Standard AS/NZS 3001.2:2022, a lithium-ion battery must be installed externally i.e behind a wall compartment or barrier that prevents the egress of gases into the liveable area, not be installed within the liveable area, and to operate within the manufacturers specified operating temperature and IP rating. Lithium-ion batteries must also be installed in a suitable battery container.

For more information, please visit Standards Australia by taking this [link](#)

### Australian Design Rules

Australian Design Rule (ADR) [42/05](#) specifies the general safety requirements for electrical installations and that they must comply with AS/NZS 3001 (Electrical installations – Transportable structures and vehicles including their site supplies).<sup>[2]</sup>

ADRs are national vehicle standards for vehicle safety, anti-theft and emissions. These standards apply to new vehicles manufactured in Australia and to imported new or second-hand vehicles being provided to the Australian market.

### Vehicle Service Bulletin 1

[Vehicle Standards Bulletin 1 \(VSB1\)](#) provides guidance information on the design, manufacture, sale, modification, maintenance, import and repair of road vehicles for industry and other clients.<sup>[3]</sup>

VSB 1 also refers to the Australian Standard AS/NZS 3001 relating to electrical installations that are intended for connection to an AC power system other than that of the tow vehicle.<sup>[4]</sup>

Should you have any questions to the above please do not hesitate to contact me via email, [jkhoury@vacc.com.au](mailto:jkhoury@vacc.com.au)

**John Khoury**  
Industry Policy Advisor

---

<sup>[1]</sup> Australian/New Zealand Standard 'Electrical installations – Connectable electrical installations and supply arrangements, part 2' AS/NZS 3001.2:2022.

<sup>[2]</sup> Vehicle Standard (Australian Design Rule 42/05- General Safety Requirements) 2018.

<sup>[3]</sup> Department of Infrastructure, Transport, Regional Development, Communication and the Arts 'Vehicle Standard Bulletins' (webpage 2023) < <https://www.infrastructure.gov.au/infrastructure-transport-vehicles/vehicles/vehicle-design-regulation/rvs/bulletins>>.

<sup>[4]</sup> Department of Infrastructure, Transport, Regional Development, Communications and the Arts 'Vehicle Standards Bulletin (Revision 6) – Trailers with an aggregate trailer mass of 4.5 tonnes or less' (2023).